IN THE SPECIFICATION

Page 1, before the first line, add the paragraph:

This is a continuation application of U.S. Serial No. 09/939,601, filed August 28, 2001.

IN THE ABSTRACT

Cancel the Abstract and add the new Abstract as follows:

--Disclosed herein is an amusement system that can be used and enjoyed by different persons without using the brain continuously and with little feeling of fatigue and which permits setting a probe at any spot on the head of the subject. The amusement system includes irradiators for irradiating the subject with light, light detectors for detection of the light that has been emitted from said irradiator and which has propagated through the living body, signal processors for processing the signal of light intensity detected by said detector and display units that show the processing results from the signal processor. The range of display of a change in intensity of said transmitted light according to the results of a test task carried out on said living body.--

Pages 1-2, the paragraph bridging these pages from

page 1, line 19 to page 2, line 21, amend the paragraph as

follows:

A subject is irradiated with light by a light source such

as semiconductor laser, light-emitting diode or lamp through

an optical waveguide such as optical fiber for irradiation

(hereinafter generically referred to as light irradiator).

The most suitable wavelength of light used for the measurement

is in the neighborhood of 800 [nonameters] nanometers that is

highly transmitted by the biological tissue, but is not

limited to this wavelength band. One end of the optical

waveguide is connected to a light source and the other end is

in contact with the skin of the subject. The light that is

[given off] imparted to the living body is intensively

scattered by the biological tissues. Part of the scattered

light passes through the cerebral cortex where high-grade

brain functions such as motion, sense and language are

concentrated and reaches a spot on the head skin some 30 mm

(in the case of adults) away from the point of light

irradiation. A light detector is provided to detect the

intensity of light that has been propagated through the living

body. The light detector is formed of an optical waveguide

such as optical fiber and a photoelectron device such as

photodiode and photomultiplier which is brought in contact

with one end of the optical waveguide. Optical signals are

converted into electric signals by the light detector. And the electric signals are processed by electronic computer.

Pages 2-3, the paragraph bridging these pages from page 2, line 22 to page 3, line 13, amend the **paragraph as follows:**

Now, let it be supposed that the brain is activated by moving body parts (hands, legs and fingers and toes). When the brain is activated, the brain blood in the cerebral cortex undergoes a secondary change (increases or decreases) to supply the activated part of the brain with oxygen and glucose. If near infrared rays (with a wavelength near 800 nanometers) are used for measurement, hemoglobin in the blood (oxidation hemoglobin and reduction hemoglobin) absorbs the light given off for measurement, and the amount of light reaching the optical fiber for detection decreases as the amount of hemoglobin increases with the activity of the brain. That is, a change in the intensity of detected light reflects the activity of the brain. A change in the light intensity is measured and the computer is controlled using the measured results, whereby an input apparatus is [materialized] formed to control the computer by measuring [man's] a person's thought reflecting [the] mental condition and brain [activities]activity.

4

Page 3, the first full paragraph, lines 14 to 19, amend the paragraph as follows:

The prior art discloses arrangements that can [materialize] <u>be used to create</u> a game (amusement system) by detecting brain activities. To [materialize] <u>create</u> an actual amusement system, however, it is necessary to provide an amusement system that different persons can use without feeling fatigue in addition to the above arrangements.